Computing Sciences Area 2022 POSTDOCSYMP

BERKELEY LAB

Tuesday, February 8, 2022



Hannah Klion - 10:00am
Particle-in-Cell Simulations
of Relativistic Magnetic
Reconnection



Osman Asif Malik - 10:30am Sampling-Based Methods for Tensor Ring Decomposition



Prabhat Kumar – 11:00am
Exascale Modeling of Electromagnetics with Applications to Microelectronics and Particle Accelerators



Vincent Dumont - 11:30am
HYPPO: A Surrogate-based,
UQ-informed, and multi-level
parallelism HPO tool



Niladri Gomes - 1:00pm Adaptive Variational Approach for Quantum Simulations



Hengrui Luo – 1:30pm
GPTune: Advanced
Problems in Surrogate-based
Black-box Optimization with
Applications



Lipi Gupta - 2:00pm ALS to NERSC Data Pipeline for Rapid Tomography

Wednesday, February 9, 2022



Ankur Kumar Gupta – 10:00am
3D CNNs Utilizing Molecular Topological
Features for Accurate Atomization Energy
Predictions



Daan Camps - 10:30am
FunFact: a Tensor Algebra Language
with Applications in Deep Learning



Yize Chen - 11:00am
Enabling Secure Learning for
Clean Energy Systems



Hengjie Wang – 11:30am

Mosaic Flow: A Transferable Deep
Learning Framework for Solving
PDEs on Unseen Domains

Thursday, February 10, 2022



Huo Chen - 10:00am
Optomechanical Quantum
Transduction Control Protocol



Jean Luca Bez – 10:30am
Towards Understanding I/O Behavior
with Interactive Exploration



Patricia Gonzalez - 11:00am
Temporal and SFQ Pulse Streams
Encoding for Area-Efficient
Superconducting Accelerators



Soham Ghosh - 11:30am
Performance portability of linear algebra routines in GW calculations